WINTER 2025

PRO CO-OP
AG CENTER

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Winter is Here - Let's Be Ready

Winter in Montana isn't just a season—it's a way of life. From subzero temperatures and biting wind chills to drifting snow and unpredictable storms, winter has a way of testing even the most seasoned. Preparation makes all the difference, whether you're heading out before sunrise, caring for livestock, or simply trying to keep your home warm and comfortable during the coldest days of the year.

At PRO Co-op, we understand the challenges that come with winter, because we live and work here too. Our goal is to help you stay warm, safe, and ready for whatever the winter months bring—from fuel and propane needs to winter gear, equipment, and everyday essentials. When the weather turns tough, you can count on PRO Co-op to help keep life moving forward.

Keep-Fill Propane

Keep a close eye on your tank levels and plan ahead by ordering propane or fuel as needed. Staying on top of your supply helps you to avoid unexpected shortages and keeps everything running smoothly—especially during periods of increased demand or changing weather conditions. Planning ahead ensures you'll have the fuel you need when you need it.

Reviewing Your Soil Test: Organic Matter

Summarized from Soil Science Review: Organic Matter by John Breker of AgVise Laboratories

In reviewing soil tests this winter, many growers are asking questions about their soil organic matter. It may be trending higher, lower, or perhaps there is more nitrogen than expected. Organic matter changes and nutrient cycling are closely related and can be explained through the soil moisture trends as well as what crop mix has been grown on that field the past several years.

Soil organic matter is a fundamental component of soil. It is comprised of living microorganisms, recently decomposed plant material, and stable humus organic compounds. Soil organic matter influences soil structure, water holding capacity, nutrient cycling, biological activity, and chemical fate and transport (e.g. pesticides). Organic matter is also influenced by soil compaction and extreme soil pH (below pH 6.5 or above pH 8 in the surface soil).

Soil organic matter is so important, you cannot really call something soil unless there is some organic matter present. The cycle of plant growth, organic material accumulation in the soil, and nutrient release from microbiological activity is a delicate balance, impacted by soil temperatures, soil moisture and plant growth.

As this region transitioned to no-till, soil organic matter in most fields increased substantially. Annual cropping increased plant biomass production and soil moisture conditions generally improved as well. Nutrient breakdown slowed initially, due to less tillage. As the organic material accumulated and there were excellent growing conditions for several sequential years, the nutrient cycling improved and overall fertility improved on many soils.

The multi-year drought in the region has resulted in lower plant biomass production and suppressed microbiological activity. Soil organic matter remained relatively stable during this time. There was less organic matter breakdown but also lower crop production. During this same dry period, many growers increased their pulse acres to improve their farm economics. Pulses affect how organic matter breaks down in the soil in a few different ways. Some of these speed up breakdown while others slow it down. 1) Pulses produce less plant material so it tends to break down faster. 2) Pulse residue has a higher nitrogen-to-carbon ratio than small grains, increasing biological activity and speed up residue breakdown compared to a small-grain-only rotation. 3) Pulse stubble doesn't catch as much rain or snow, often leaving soils drier than nearby cereal fields. Drier soils mean less microbial activity, which can slow down organic matter breakdown.

In 2025, adequate soil moisture generally lined up with warmer soils from the July-August rainfall. After several dry years, this resulted in a tremendous increase in nutrient cycling in a short timeframe. Crops that were still actively growing at that time experienced a dramatic increase in nutrient availability: small grains had higher protein levels than anticipated, pulse crop maturity and drydown was slowed, and weed growth was explosive! Soil tests this fall also reflect these unusual soil conditions. In many cases, there is more soil available nitrate (and other nutrients) than we would otherwise expect. In some samples, soil organic matter is trending a little lower than growers hoped.

From all of us at PRO Co-op, thank you for trusting us to keep your homes, farms, and families going strong.

Wishing you a warm and wonderful holiday season.

HOLIDAY HOURS

December 24 - 8:00 am - 12:00 pm
December 25 - Closed

December 31 - 8:00 am - 12:00 pm
January 1 - Closed

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Find us on Facebook and Instagram for updates, specials, and community highlights.

Montana Cold Snaps: Why Fuel Usage Spikes Fast

When temperatures plunge, fuel and propane usage can increase quickly—sometimes faster than expected. Furnaces run longer, equipment works harder, and backup heat sources get more use during extreme cold snaps. A stretch of subzero weather can significantly impact tank levels in just a few days. Keeping a close eye on usage and planning fuel orders ahead of time helps prevent surprises and ensures homes, farms, and businesses stay warm when it matters most.

Stop by PRO Co-op For All Your Winter Gear!

Putting Fertilizer Dollars Where They Pay

Low grain prices and high input costs are squeezing margins across the farm. In times like these, efficiency becomes even more important, especially when deciding which acres are worth investing in. This is where variable rate fertilizer shines.

Across Northeast Montana, we see tremendous variability in topography, soil types, and moisture. As most growers know firsthand, hilltops, ridges, saline areas, and other low-producing zones simply do not have the same yield potential as the better soils in the same field. When fertilizer is applied at a single flat rate, those low-producing acres often receive more nutrients than they can realistically use, while other acres are under-fertilized. That imbalance can quietly add up to a significant economic cost.

Variable rate fertility helps correct that. By adjusting rates across management zones, we can shift fertilizer dollars toward the acres that can truly respond. For example, if a field is managed to a 40-bushel wheat yield goal, a flat nitrogen rate to meet that goal represents roughly $42 per acre in urea applied across the entire field. In areas that consistently only produce 20 bushels, those acres are effectively fertilized at nearly double their realistic need, resulting in roughly $21 per acre being spent with minimal benefit to yield or quality.

With variable rate, instead of overspending on acres with limited potential, we can reallocate fertilizer to the high-yielding parts of the field that drive profitability. Those same fertilizer dollars are then working to support yield, protect protein, and help the crop finish instead of running short late in the season.

This approach improves input efficiency, supports more consistent crop quality, and increases the return on the fertilizer that growers are already purchasing. Rather than spreading costs evenly across uneven ground, fertilizer investment is concentrated where it produces measurable yield and quality benefits.

As we look toward next season, placing fertilizer where it pays remains one of the most effective ways to stretch input dollars further, protect margins, and make the most of every acre.

Winter Readiness

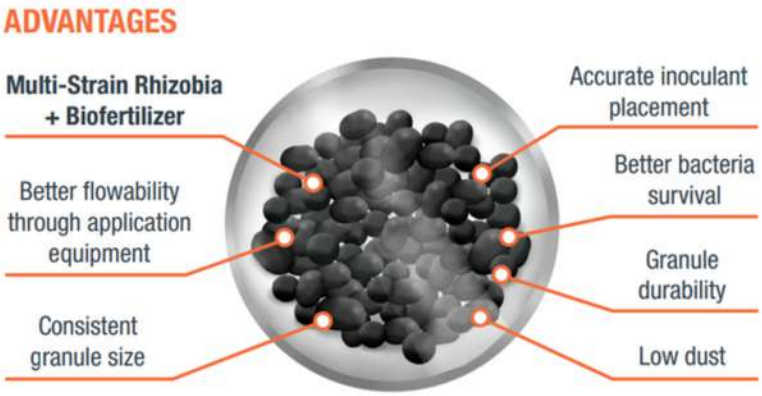
- **Monitor fuel and propane usage closely**
- **Keep equipment winterized and fueled**
- **Protect water lines and livestock waterers**
- **Stock up on cold-weather supplies before storms hit**

Inoculant 2026: Book Now to Guarantee Availability

LalFix Start Pulses

LalFix Start contains multiple strains of the Rhizobium bacteria as well as a strain of Bacillus Velezensis that improves phosphorus availability in the root zone, which is particularly important in high pH soils where phosphorus is limiting. LalFix Start Granular is low-dust, flows easily in drills and has both pea/lentil and chickpea rhizobia in a single product, making planning easier.

We also carry Lalfix Peat pea/lentil and chickpea inoculation.



Nodulator Duo Granular Inoculant by BASF

The newest high-performing Rhizobia strain for peas and lentils in a low dust, durable granule. Also includes the biological biofilm Bacillus Subtilis to keep roots moist and growing in poor soil conditions for improved uptake of nutrients and water.

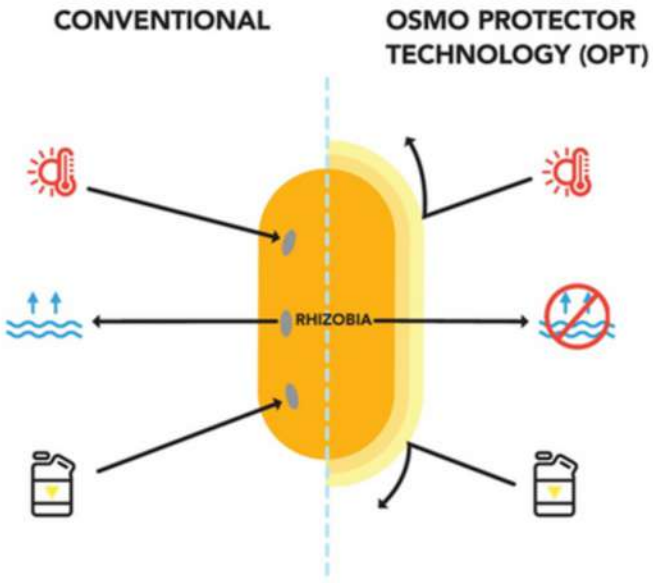
Untreated Nodulator Inoculant

Nodulator Pea/Lentil Peat

High quality peat inoculant mixes easily with dry seed. Highest Rhizobia count per gram – guaranteed 1 billion Rhizobia per gram!

Osmium Pea/Lentil or Chickpea Liquid Inoculant by Rizobacter

Unique liquid inoculant featuring Osmo Protector Technology to protect the Rhizobium bacteria from seed treatment fungicide, high temperatures or dry soil conditions. Osmium liquid inoculant can be batch-mixed with certain seed treat fungicides and doesn't require pre-mixing for ease of application.



Conventional rhizobia inoculant is more susceptible to mortality losses from stress which can affect nodulation.

Rhizobia with OPT has improved resistance to stress. Delivering more consistent nodulation in challenging conditions.

Improving Nutrient Uptake and Soil Function with Resurge

Humic acids and other humic substances help mobilize nutrients from the soil into plants and have a long track record of supporting stronger plant growth. Resurge delivers highly concentrated humic compounds in a low-dust, uniformly sized granule that fits easily into a standard dry fertilizer program.

Beyond nutrient availability, Resurge contributes to better soil function. It can support improvements in soil pH, electrical conductivity (EC), organic matter, and overall microbial activity. These shifts help create a more favorable environment for root development and early crop vigor.

Pro Co-op has used Resurge across a wide range of soils and crops. We consistently see value in challenging soils—both sandy soils and tight clays. While multiple crops respond, canola shows the most visible difference. Over several years, we have observed stronger root systems and more even, earlier flowering where Resurge is used.

Resurge is designed for in-furrow placement with the seed. It can be blended with starter fertilizer or delivered through a separate drill compartment.

As the year comes to a close, we want to thank our customers, members, and communities for your continued support throughout the year. We're grateful for the opportunity to serve you and be part of your operations and daily lives.

From all of us at PRO Co-op, we wish you a Merry Christmas, a safe holiday season, and a Happy New Year filled with good health, success, and new opportunities. We look forward to serving you in the year ahead.

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Keeping Equipment Running When Temps Drop Below Zero

Cold temperatures can be especially hard on equipment, making winter preparation essential. Below-zero conditions can cause fuel to gel, batteries to lose power, and engines to struggle during startup. Without proper preparation, even reliable equipment can experience unexpected downtime during the coldest months of the year.

Simple preventative steps can help keep equipment running smoothly. Using winter fuel additives, keeping fuel tanks full to reduce condensation, and plugging in engine heaters when possible all help improve cold-weather performance. Regularly checking batteries, filters, and fluids ensures equipment is ready when it's needed most.

Winterizing equipment before extreme cold arrives saves time and reduces frustration later. Reliable equipment is critical during winter, whether for farm operations, snow removal, or daily work. Proper preparation helps ensure machinery is dependable, even when temperatures drop well below zero.

Make it merry and make it fun! PRO Co-op has Christmas trees and decorations to deck the halls, plus sleds and snowboards to make the most of a snowy Christmas vacation.